UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,810	09/29/2003	Andrew John Farnsworth	1578.619(PUS-1155)	2209

54120 7590 01/28/2008

RESEARCH IN MOTION
ATTN: GLENDA WOLFE
BUILDING 6, BRAZOS EAST, SUITE 100
5000 RIVERSIDE DRIVE
IRVING, TX 75039

EXAMINER	
VU, MICHAEL T	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
01/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,810	FARNSWORTH, ANDREW JOHN	
	Examiner	Art Unit	
	Michael Vu	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,6-9,11 and 13-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4, 6-9, 11, 13-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's Remarks/Arguments filed November 01, 2007, have been fully considered but they are not persuasive.

2. On page 5, lines 10-11 of Applicant's Remarks, Applicant argues that "neither of Maggenti and Sarkkinen teaches the optional sending of a response message receivable".

In response, the examiner has been carefully reviewed the Applicant's Remark. However, the examiner must give the broadest reasonable interpretation to all claims presented that Neumann indeed teaches the **cell identifier** contains the following message elements: A message element for identifying the information element **cell identifier** for instance, an identifier for information elements INFORMATION ELEMENT IDENTIFIER, a message element showing the length of the information element, for instance, a length indicator LENGTH INDICATOR, one or more message elements **which clearly identify** a location area, a routing area and a cell worldwide. Said identification can take place in several parts, for example, by using an identifier of a country where the network is located, for example, a mobile country code MCC, and an identifier of the network within said country, for example, a mobile network code

MNC. After the network has unmistakably been identified worldwide, the location area, the routing area and the cell have to be clearly determined only within said network. This can be achieved in view of the location area by means of a location area code LAC. Within a network a routing area can be identified by means of a routing area code RAC and a cell by means of a cell identity CI (See paragraph Col. 5, lines 1-65).

The means for converting data of means IET generates said information, **which clearly identifies** a routing area worldwide, for instance, a routing area identity RAI, from message elements being contained in the **cell identifier**. A routing area identity RAI can be made up of the message elements mobile country code MCC, mobile network code, location area code LAC and routing area code RAC (See paragraph Col 5, lines 23-65).

Moreover, Neumann teaches to how a cell global identifier CGI is obtained by means IET2 from a cell identifier. The means for converting data of means IET2 generates from message elements contained in a **cell identifier** the information, **which clearly identifies** a cell worldwide, for instance, a cell global identifier CGI. A cell global identifier CGI can be made up of the message elements mobile country code MCC, mobile network code MNC, location area code LAC and cell identifier value CI VALUE (See Col. 6, line 7 through Col. 7, line 66).

3. On page 6, lines 4-6 of Applicant's Remarks, Applicant argues that "Maggenti fails to disclose the receiving of a message at the UE that indicates that the UE should be in a dedicated channel state", and "Maggenti also fails to make disclosure of the message being a cell update confirm message, a URA, an update confirm message, or an RRA setup message" on lines 16-17.

In response, the examiner has been carefully reviewed the Applicant's Remark. However, the examiner must give the broadest reasonable interpretation to all claims presented that Sarkkinen indeed clearly teaches The preferred embodiment is based on an assumption that UEs are at least attached to the network, namely the UEs are not in a dead state and have MM context at the CN side. UEs are in a dead state when, e.g., the power of the UE is turned off or when the UE has not indicated its presence to the network by performing the IMSI/GPRS Attachment, in order to establish an MM context to the core network. And the UEs can be in IDLE mode from RRC point of view as shown in FIG. 1. If the UE has RRC connection, then the mode of the UE can be either cell_DCH, cell_FACH, cell_PCH or URA_PCH. Another assumption is that the UE is aware of the multicast subscription, specifically the UE is configured to receive multicast related data. The UE has information about multicast services on which it is entitled, multicast area, priority of the subscription, etc. (See paragraphs [0047-0063], particularly paragraph [0054-0063]).

4. On page 8, lines 5-8 of Applicant's Remarks, Applicant argues that "Sarkkinen fails to disclose a message that is one of a cell update confirm message, a URA confirm message, or an RNC confirm message, and further fails to disclose the clearing from the URA any record of a cell identifier in response to the message".

In response, the examiner has been carefully reviewed the Applicant's Remark. However, the examiner must give the broadest reasonable interpretation to all claims presented that Sarkkinen indeed clearly teaches the modifications in UTRAN Registration Area (URA) Update message [0002], and The MULTICAST AREA UPDATE procedure is performed by the UE, when UE enters in the new Multicast Area. For this purpose it is possible to define either a new RRC signalling message or UE can use already defined RRC messages, which are updated with required information fields. These kind of RRC messages could be for example cell update/URA update messages. and further teaches The UEs can be in IDLE mode from RRC point of view as shown in FIG. 1. If the UE has RRC connection, then the mode of the UE can be either cell_DCH, cell_FACH, cell_PCH or URA_PCH. Another assumption is that the UE is aware of the multicast subscription, specifically the UE is configured to receive multicast related data. The UE has information about multicast services on which it is entitled, multicast area, priority of the subscription, etc [0048].

Moreover, Sarkkinen teaches the UE in Idle Mode, the UE has the MM context in the core network side, and therefore the network is aware of the UE in the PLMN. However, no resources are reserved for the UE from the UTRAN side. As soon as the RNC detects that the UE enters into a new cell, and the UE is configured to receive multicast data, the UE checks the priority of the multicast service subscription. If this priority indicates the highest priority the UE sends to the network either a new Multicast location update message or it can use the currently defined RRC. A Cell Update message is sent to update support multicast related information [0051].

Additional, Sarkkinen teaches the UE in RRC Connected Mode, when UE is in a RRC connected mode and has a RRC connection from the UTRAN side (i.e., is known by the UTRAN), the state of the RRC can be either cell_DCH, cell_FACH, cell_PCH or URA_PCH. See FIG. 1. On the cell_DCH, cell_FACH and cell_PCH states, the UE's location is known on the cell level already and it will be updated based on providing a soft handover (cell_DCH) and cell update procedures. Currently upon cell URA_PCH state the location of the UE is known in the RNC on URA level, which includes more than one cell [0055].

Furthermore Sarkkinen teaches the Cell_DCH, Cell_FACH, Cell_PCH States, when UE enters into a new cell in cell_DCH state (i.e. soft handover is activated or UE performs hard handover etc) the multicast related information is updated in RNC without indication from UE. And when UE enters into a new cell in cell_FACH or cell_PCH state, the UE can send either the MULTICAST AREA

UPDATE message or cell update message, which has been updated to carry also multicast related information. It is not required to check the priority of the service subscription [0056]. And the Cell_URA_PCH State, wherein the cell URA_PCH state, when the UE enters into a new cell, the UE checks the priority of the multicast service subscription. If the priority indicates "critical " priority, then the UE sends the MULTICAST AREA UPDATE message to the network. If the configured priority is low, then no messages will be sent to the network. If the UE in cell_URA_PCH state enters into a new URA area, the UE sends a RRC: URA UPDATE message to the network, which is updated with multicast related information [0059-0063].

5. Therefore, the argued limitations are the same as disclosed by the reference or the limitations are written broad such that they read on the cited art, rejections are maintained as repeated below:

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-2, 7-9, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti (US 2003/0012149) in view of Sarkkinen (US 2003/0119533), and further in view of Neumann (US 6,792,270).

Regarding **claims 1 and 8**, Maggenti teaches a method of processing messages received by a device from a network (Figs. 1-2, [0033-0039]), the method comprising: receiving a message at the device that indicates that the device should be in a dedicated channel state [0006],

but is silent on wherein the message **is one of** the following: a Cell Update Confirm message or a URA Update Confirm message or RRC Connection setup message; and, in response to the message, clearing from the device any record of a cell identifier.

However, Sarkkinen teaches a method and apparatus for keeping track of User equipment (UE) locations for performing multicast services in a network that includes a Radio Resource Controller (RRC) connection in response to the message, updating and cleaning or clearing or deleting of the record can be made based on User Equipments' identification (see Figs. 1-12, [0005-0009, 0034, 0041-0042, 0077]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Maggenti, such that wherein the message **is one of** the following: a Cell Update Confirm message or a URA Update Confirm message or RRC Connection setup message; and, in response to the message, clearing from the device any record of a cell identifier, for

allowing the Radio network Controller to keep track a record of the UEs locations on the network.

But Maggenti/Sarkkinen do not clearly teach on an optionally sending a response message receivable by the network, after the UE is cleared of any record of a cell identifier.

However, Neumann teaches a method for setting up and/or updating the device includes a message contained in the cell identifier, which cleared, deleted the old entry and to store a new entry with the updated data and/or further deleting, storing or updating identifying information about virtual connection (See paragraphs Col.1, line 55 through Col. 2, line 2, Col.5, line 3 through Col. 6, line 67, Col. 7, lines 45-67, claim 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Maggenti/Sarkkinen, such that an optionally sending a response message receivable by the network, after the UE is cleared of any record of a cell identifier, to allows for the automated set-up of a device and/or for setting up and updating immediately after each modification of connections.

Regarding **claims 2 and 9**, Maggenti/Sarkkinen/Neumann teach the method according to claim 1 wherein the dedicated channel is a Cell_DCH channel [0047-0063] of Sarkkinen.

Regarding **claims 7 and 14**, Maggenti/Sarkkinen/Neumann teach the method according to claim 1 wherein when the message includes a new cell identifier, the method further comprises, in response to the message, not storing

in the device any record of the cell identifier included in the message [0037-043, 0074] of Sarkkinen.

Regarding **claim 15**, Maggenti/Sarkkinen/Neumann teach the mobile telecommunication device incorporating apparatus according to claim 8, (See Figs 2-12) of Sarkkinen.

8. Claims 4, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti/Sarkkinen/Neumann, in further view of Wu (US 2003/0210676).

Regarding **claims 4 and 11**, Maggenti/Sarkkinen teach the method according to claim 1, **but are silent on** wherein the cell identifier is a Cell Radio Network Temporary Identifier.

However, Wu teaches a wireless communications, telecommunication systems such as 3G or UTMS radio interface protocol architecture that implement in both the UTRAN and the UE, including an RRC layer to provide the mobility information of a Cell Radio Network Temporary Identifier (C_RNTI) used as UE to identifiers within an UTRAN in signaling messages between UE and UTRAN [0060].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Maggenti/Sarkkinen, such that wherein the cell identifier is a Cell Radio Network Temporary Identifier, to enhance the mobility of the user equipments connected over the radio network.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael T. Vu

Examiner

JEAN GELIN
PRIMARY EXAMINER